



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/364,432	07/30/1999	WILLIAM M. NORR	W.M.NORRI	9444
7590	03/08/2004		EXAMINER	
RYAN & MASON LLP 90 ROREST AVENUE LOCUST VALLEY, NY 11560			HAMILTON, MONPLAISIR G	
		ART UNIT	PAPER NUMBER	
		2172		
		DATE MAILED: 03/08/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/364,432	NORR, WILLIAM M.
	Examiner Monplaisir G Hamilton	Art Unit 2135

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 July 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-38 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All
    - b) Some \*
    - c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

1. The communication filed on 7/28/03 amended Claims 1, 12, 15, 26, 29, 31, 33-35 and 37. Claims 1-38 remain for examination.

### *Drawings*

2. The drawings were received on 7/28/03. These drawings are acceptable.

### *Response to Arguments*

3. Examiner acknowledges applicants attempt to incorporate limitations from Claim 5, which reads “The method of claim 1 wherein the multiple bitstreams correspond to subbands of at least first and second digital sidebands of a host carrier signal in an in-band on-channel (IBOC) digital audio broadcasting system.” The limitation added to Claim 1 read “wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system”. The scope of limitation added to Claim 1 is much broader than that of original Claim 5. The added limitations have thus been treated as grounds for a new rejection.

Applicant's argument, see Paper No. 6, filed 7/28/03, with respect to the rejection of Claims 1-4, 7-18 and 21-38 under 35 U.S.C § 103(a) as being unpatentable over U.S. Patent 5,751,806, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US 6,026,164 issued to Sakamoto et al and U.S. 5,267,021 issued to Ramchandran et al.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 10-12, 14-17, 24-26, 28-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6026164 issued to Sakamoto et al, herein referred to as Sakamoto in view of U.S. 5267021 issued to Ramchandran, herein referred to as Ramchandran.

Referring to Claims 1, 15, 29, 31:

Sakamoto discloses a method of delivering information, the method comprising the step of:

delivering at least a portion of the information to a receiver in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level (col 2, lines 45-55; col 3, lines 5-30; col 7, lines 20-30);

and wherein upon decryption of the at least partially-encrypted format, access to the information is provided at another quality level (col 6, lines 5-30).

Sakamoto does not explicitly disclose "wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system".

Ramchandran discloses the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system (col 15, lines 20-40).

Art Unit: 2135

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sakamoto such that multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system. One of ordinary skill in the art would have been motivated to do this because it would provide a system that is able to broadcast signals representing the same data at different resolutions (Sakamoto: col 4, lines 45-60).

Referring to Claims 33-34:

Sakamoto discloses a method of delivering information, the method comprising the step of: delivering at least a portion of the information to a receiver, using at least first and second bitstreams of a digital communication system (col 4, lines 5-10), wherein the first bitstream is encrypted and the second bitstream is unencrypted (col 3, lines 5-15), such that access to the information is provided at a first quality level (col 4, lines 5-15, 50-55);

and wherein upon decryption of the first bitstream, access to the information is provided at another quality level (col 6, lines 5-30).

Sakamoto does not explicitly disclose “wherein the first and second bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system”.

Ramchandran discloses wherein the first and second bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system (col 15, lines 20-40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sakamoto such that multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system. One of ordinary

skill in the art would have been motivated to do this because it would provide a system that is able to broadcast signals representing the same data at different resolutions (col 4, lines 45-60). Furthermore the system would be able to preview/display low quality information without decrypting the information at a high quality (Sakamoto: col 13, lines 20-35).

Referring to Claim 35 and 37:

Sakamoto discloses a method of delivering information, the method comprising the steps of: delivering at least a portion of the information to a receiver in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level without decrypting the information in the at least partially-encrypted format (col 3, lines 5-30; col 4, lines 5-20); and providing via an electronic commerce system a key for decrypting the information in the at least partially-encrypted format (col 2, lines 30-40; col 4, lines 10-15; col 6, lines 1-20), such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level (col 4, lines 50-55; col 6, lines 15-45);

Sakamoto does not explicitly disclose “wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system”.

Ramchandran discloses wherein the first and second bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system (col 15, lines 20-40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sakamoto such that multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system. One of ordinary

skill in the art would have been motivated to do this because it would provide a system that is able to broadcast signals representing the same data at different resolutions (col 4, lines 45-60). Furthermore the system would be able to preview/display low quality information without decrypting the information at a high quality (Sakamoto: col 13, lines 20-35).

Referring to Claims 2 and 16:

Sakamoto in view of Ramchandran disclose the limitations of Claims 1 and 15 above. Sakamoto further discloses wherein access to the information is provided at the first quality level without decrypting the information in the at least partially-encrypted format (col 13, lines 28-25).

Referring to Claims 3 and 17:

Sakamoto in view of Ramchandran disclose the limitations of Claims 1 and 15 above. Sakamoto further discloses providing a key for decrypting the information in the at least partially-encrypted format, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level (col 4, lines 1-15; col 6, lines 5-20).

Referring to Claims 10 and 24:

Sakamoto in view of Ramchandran disclose the limitations of Claims 1 and 15 above. Sakamoto further discloses wherein at least a subset of the multiple bitstreams are unencrypted, and the information at the first quality level is generated using only the unencrypted bitstreams (col 3, lines 30-45; col 13, lines 28-25).

**Referring to Claims 11 and 25:**

Sakamoto in view of Ramchandran disclose the limitations of Claims 1 and 15 above. Sakamoto further discloses storing the information in the at least partially-encrypted format in a storage device accessible to the receiver (col 6, lines 30-40).

**Referring to Claims 12 and 26:**

Sakamoto in view of Ramchandran disclose the limitations of Claims 12 and 25 above. Sakamoto further discloses the storage device comprises at least one of a disk, a memory card and a cartridge (col 6, lines 30-40).

**Referring to Claims 14 and 28:**

Sakamoto in view of Ramchandran disclose the limitations of Claims 11 and 25 above. Sakamoto further discloses wherein the storage device is adaptable for insertion into (I) a corresponding receptacle of the receiver, and (II) a corresponding receptacle of an information processing device a network connection with a server for obtaining a decryption key for decrypting the information in the at least partially-encrypted format (col 6, lines 30-45).

**Referring to Claims 30, 32:**

Sakamoto in view of Ramchandran disclose the limitations of Claims 29 and 31 above. Sakamoto further discloses access to the information is provided at the first quality level without decrypting the information in the at least partially-encrypted format (col 13, lines 28-25), the method further including the step of providing a key for decrypting the information in the at least

partially-encrypted format, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level (col 4, lines 1-15; col 6, lines 5-20).

5. Claims 4-9, 13, 18-23, 27, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6026164 issued to Sakamoto et al, herein referred to as Sakamoto in view of U.S. 5267021 issued to Ramchandran, herein referred to as Ramchandran further in view of US 5740246 issued to Saito herein referred to as Saito.

Referring to Claims 4, 18, 13, 27, 36 and 38:

Sakamoto in view of Ramchandran disclose the limitations of Claims 3, 11, 17, 25, 35 and 37 above.

Sakamoto in view of Ramchandran does not explicitly disclose “wherein the key for decrypting the information in the at least partially-encrypted format is supplied over a network connection established with a server”.

Saito discloses wherein the key for decrypting the information in the at least partially-encrypted format is supplied over a network connection established with a server (col 1, lines 35-50).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sakamoto in view of Ramchandran such that the key for decrypting the information in the at least partially-encrypted format is supplied over a network connection established with a server. One of ordinary skill in the art would have been

Art Unit: 2135

motivated to do this because it would provide a key system that controls access to secure information (Saito: col 1, lines 1-8).

Referring to Claims 5 and 19:

Sakamoto in view of Ramchandran disclose the limitations of Claims 1 and 15 above.

Sakamoto in view of Ramchandran does not explicitly disclose “an in-band on-channel (IBOC) digital audio broadcasting system”.

Saito discloses an in-band on-channel (IBOC) digital audio broadcasting system (col 7, lines 60-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sakamoto in view of Ramchandran such that an in-band on-channel (IBOC) digital audio broadcasting system is used by the broadcasting system. One of ordinary skill in the art would have been motivated to do this because it would enable the system to control the use of audio/video information based on user payment (Saito: col 8, lines 55-62).

Referring to Claims 6 and 20:

Sakamoto and Ramchandran in view of Saito disclose the limitation of Claims 5 and 19 above. Saito further discloses wherein the host carrier signal is an analog FM host signal (col 7, lines 60-65).

Art Unit: 2135

Referring to Claims 7 and 21:

Sakamoto in view of Ramchandran disclose the limitations of Claims 1 and 15 above.

Sakamoto in view of Ramchandran does not explicitly disclose "wherein the information delivered to the receiver comprises audio information".

Saito discloses wherein the information delivered to the receiver comprises audio information (col 7, lines 60-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sakamoto in view of Ramchandran such audio information is delivered using the system. One of ordinary skill in the art would have been motivated to do this because it would enable the system to control the use of audio/video information based on user payment (Saito: col 8, lines 55-62).

Referring to Claims 8 and 22:

Sakamoto and Ramchandran in view of Saito disclose the limitation of Claims 7 and 21 above. Saito further discloses wherein the audio information comprises a particular music selection (col 8, lines 10-11).

Referring to Claims 9 and 23:

Sakamoto and Ramchandran in view of Saito disclose the limitation of Claims 7 and 21 above.

Sakamoto and Ramchandran in view of Saito does not explicitly disclose "the first quality level of the audio information corresponds to an FM-quality level, and a second quality

Art Unit: 2135

level of the audio information corresponds to a CD quality level". However, Sakamoto discloses accessing information at a first quality level without a key for decrypting the higher-level information. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teaching of Sakamoto and Ramchandran in view of Saito such that the first level is FM and the second is CD. One of ordinary skill in the art would have been motivated to do this because it would allow the user to hear the lower-quality information without decrypting the higher level CD data, thus providing a preview method (Sakamoto: col 13, lines 20-35).

#### *Prior Art*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,385,596 issued to Wiser et al. Wiser discloses a computer implemented online music distribution system provides for the secure delivery of audio data and related media, including text and images, over a public communications network. The online music distribution system provides security through multiple layers of encryption, and the cryptographic binding of purchased audio data to each specific purchaser. The online music distribution system also provides for previewing of audio data prior to purchase. In one embodiment, the online music distribution system is a client-server system including a content manager, a delivery server, and an HTTP server, communicating with a client system including a Web browser and a media player. The content manager provides for management of media and audio content, and processing of purchase requests. The delivery server provides delivery

Art Unit: 2135

of the purchased media data. The Web browser and HTTP server provide a communications interface over the public network between the content manager and media players. The media player provides for encryption of user personal information, and for decryption and playback of purchased media data. Security of purchased media data is enhanced in part by the use of a personal, digital passport in each media player. The digital passport contains identifying information that identifies the purchaser, along with confidential information, such as credit card number, and encryption data, such as the media player's public and private keys. The media player encryption data is used to encrypt purchased media data, which is decrypted in real time by the media player. The media player also displays confidential information, such as the purchaser's credit card number, during playback.

***Final Rejection***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2135

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2135

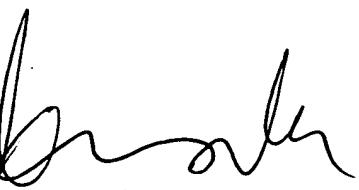
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is (703) 305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monplaisir Hamilton



KIM YU  
SUPERVISORY PATENT EXAMINER  
TELEPHONE NUMBER 2135